

IN THE CLAIMS:

Please amend the following claims:

1. (Amended) A fusion transcript consisting of a homologue cross-over between two different genes with more than 80% sequence homology in certain regions, in particular regions of cross-over.
2. (Amended) A fusion transcript according to claim 1, wherein the two genes are the genes of SCCA1 and SCCA2.
3. (Amended) A full length fusion transcript protein between SCCA1 and SCCA2 having switched reactive site loops compared to basic promoter.
4. (Amended) A substantially full length fusion transcript protein between SCCA1 and SCCA2 having switched reactive site loops compared to basic promoter.
5. (Original) A fusion protein according to claim 4 coded by one or more of exons 2 - 7 of SCCA1 gene fused to exon 8 of SCCA2 gene.
6. (Original) A fusion protein according to claim 1 coded by exon 2 - 7 of SCCA1 gene fused to exon 8 of SCCA2 gene.
7. (Original) A fusion protein according to claim 4 coded by one or more of exons 2 - 7 of SCCA2 gene fused to exon 8 of SCCA1 gene.
8. (Original) A fusion protein according to claim 1 coded by exon 2 - 7 of SCCA2 gene fused to exon 8 of SCCA1 gene.
9. (Original) A fusion protein according to claim 5, wherein the protein sequence is MNSLSEANTK FMFDLFQQFR KSKENNIFYS PISITSALGM VLLGAKDNTA QQIKKKVLHFD QVTENTTGKA ATYHVDRSGN VHHQFQKLLTE FNKSTDAYE

LKIANKLFGE KTYLFLQEYL DAIKKFYQTS VESVDFANAP EESRKKINSW
VESQTNEKIK NLIPEGNIGS NTTLVLVNAI YFKGQWEKKF NKEDTKEEKF
WPNKNTYKSI QMMRQYTSFH FASLEDVQAK VLEIPYKGKD LSMIVLLPNE
IDGLQKLEEK LTAEKLMEMWT SLQNMRETCV DLHLPRFKME ESYDLKDTLR
TMGMVNIFNG DADLSGMTWS HGLSVSKVLH KAFVEVTEEG VEAAAATAVV
VVELSSPSTN EEFCCNHPFL FFIRQNKTNS ILFYGRFSSP

10. (Original) A DNA sequence sequence coding for a fusion SCCA1/SCCA2 protein.

11. (Original) A DNA sequence comprising the nucleotide sequence of exon 2 – 7 of SCCA1 fused to the nucleotide sequence of exon 8 of SCCA2.

12. (Original) A DNA sequence according to claim 11, wherein the nucleotide sequence is
ATGAATTACAC TCAGTGAAGC CAACACCAAG TTCATGTTCG ACCTGTTCCA
ACAGTTCAGA AAATCAAAAG AGAACACACAT CTTCTATTCC CCTATCAGCA
TCACATCAGC ATTAGGGATG GTCCTCTTAG GAGCCAAAGA CAACACTGCA
CAACAGATTA AGAACGTTCT TCACTTGAT CAAGTCACAG AGAACACACCAC
AGGAAAAGCT GCAACATATC ATGTTGATAG GTCAGGAAAT GTTCATCACC
AGTTTCAAAA GCTTCTGACT GAATTCAACA AATCCACTGA TGCATATGAG
CTGAAGATCG CCAACAAGCT CTTCGGAGAA AAAACGTATC TATTTTACA
GGAATATTCA GATGCCATCA AGAAATTAA CCAGACCAGT GTGGAATCTG
TTGATTTGC AAATGCTCCA GAAGAAAGTC GAAAGAAGAT TAACTCCTGG
GTGGAAAGTC AAACGAATGA AAAAATTAAA AACCTAATTCTGAAGGTAA
TATTGGCAGC AATACCACAT TGGTTCTGT GAACGCAATC TATTCAAAG
GGCAGTGGGA GAAGAAATT AATAAAGAAG ATACTAAAGA GGAAAAATIT
TGGCCAAACA AGAATACATA CAAGTCCATA CAGATGATGA GGCAATACAC
ATCTTTCAT TTTGCCTCGC TGGAGGATGT ACAGGCCAAG GTCCTGGAAA
TACCATACAA AGGCAAAGAT CTAAGCATGA TTGTGTTGCT GCCAAATGAA
ATCGATGGTC TCCAGAAG CT TGAAGAGAAA CTCACTGCTG AGAAATTGAT
GGAATGGACA AGTTGCAGA ATATGAGAGA GACATGTGTC GATTACACT
TACCTCGGTT CAAAATGGAA GAGAGCTATG ACCTCAAGGA CACGTTGAGA

ACCATGGGAA TGGTGAATAT CTTCAATGGG GATGCAGACC TCTCAGGCAT
GACCTGGAGC CACGGTCTCT CAGTATCTAA AGTCCTACAC AAGGCCTTG
TGGAGGTAC TGAGGAGGGA GTGGAAGCTG CAGCTGCCAC CGCTGTAGTA
GTAGTCGAAT TATCATCTCC TTCAACTAAT GAAGAGTTCT GTTGTAAATCA
CCCTTCCTA TTCTTCATAA GGCAAAATAA GACCAACAGC ATCCTCTTCT
ATGGCAGATT CTCATCCCCA

13. (Amended) A plasmid comprising the nucleotide sequence corresponding to one or more of exons 2 - 7 of SCCA1 gene fused to exon 8 of SCCA2 gene.

14. (Amended) A plasmid comprising the nucleotide sequence corresponding to exons 2 - 7 of SCCA1 fused to the nucleotide sequence of exon 8 of SCCA2.

15. (Amended) A plasmid comprising the nucleotide sequence corresponding to one or more of exons 2 – 7 of SCCA2 gene fused to exon 8 of SCCA1 gene.

16. (Amended) A plasmid comprising the nucleotide sequence corresponding to exons 2 - 7 of SCCA2r gene fused to exon 8 of SCCA1 gene.

17. (Amended) A plasmid according to [claims 13-14] claim 13, comprising the nucleotide sequence: of claim 12 ATGAATTCAC TCAGTGAAGC CAACACCAAG TTCATGTTCG
ACCTGTTCCA ACAGTTCAGA AAATCAAAAG AGAACAAACAT CTTCTATTCC
CCTATCAGCA TCACATCAGC ATTAGGGATG GTCCTCTTAG GAGCCAAAGA
CAACACTGCA CAACAGAGTTA AGAAGGTTCT TCACTTGAT CAAGTCACAG
AGAACACCCAC AGGAAAAGCT GCAACATATC ATGTTGATAG GTCAGGAAAT
GTTCATCACC AGTTCAAAA GCTTCTGACT GAATTCAACA AATCCACTGA
TGCATATGAG CTGAAGATCG CCAACAAGCT CTTGGAGAA AAAACGTATC
TATTTTACA GGAATATTTA GATGCCATCA AGAAATTTA CCAGACCAGT
GTGGAATCTG TTGATTTGC AAATGCTCCA GAAGAAAGTC GAAAGAAGAT
TAACCTCTGG GTGGAAAGTC AACGAATGA AAAAATTAAA AACCTAATT
CTGAAGGTAA TATTGGCAGC AATACCACAT TGGTTCTGT GAACGCAATC

TATTTCAAAG GGCAGTGGGA GAAGAAATT AATAAAGAAG ATACTAAAGA
GGAAAAATIT TGGCCAAACA AGAATACATA CAAGTCCATA CAGATGATGA
GGCAATACAC ATCTTTCAT TTTGCCTCGC TGGAGGATGT ACAGGCCAAG
GTCCTGGAAA TACCATAACAA AGGCAAAGAT CTAAGCATGA TTGTGTTGCT
GCCAAATGAA ATCGATGGTC TCCAGAAG CT TGAAGAGAAA CTCACTGCTG
AGAAATTGAT GGAATGGACA AGTTTGCAGA ATATGAGAGA GACATGTGTC
GATTTACACT TACCTCGGTT CAAAATGGAA GAGAGCTATG ACCTCAAGGA
CACGTTGAGA ACCATGGGAA TGGTGAATAT CTTCAATGGG GATGCAGACC
TCTCAGGCAT GACCTGGAGC CACGGTCTCT CAGTATCTAA AGTCCTACAC
AAGGCCTTG TGGAGGTCAC TGAGGAGGGA GTGGAAGCTG CAGCTGCCAC
CGCTGTAGTA GTAGTCGAAT TATCATCTCC TTCAACTAAT GAAGAGTTCT
GTTGTAATCA CCCTTCCTA TTCTTCATAA GGCAAAATAA GACCAACAGC
ATCCTCTTCT ATGGCAGATT CTCATCCCCA, and deposited at ECACC under deposition number ECACC 01031315.

18. (Amended) A protein expression system for production of SCCA1/SCCA2 fusion protein.
19. (Amended) A recombinant bacteria comprising a plasmid according to [claims 13-17] claim 13.
20. (Amended) A recombinant bacteria comprising a plasmid according to claim 14.
21. (Amended) A recombinant E. coli comprising a plasmid according to claim 13.
22. (Amended) A recombinant E. coli comprising a plasmid according to claim 14.
23. (Amended) A method for detecting the gene rearrangement forming the SCCA1/SCCA2 fusion protein using a cDNA cloning and sequencing analysis of tumor DNA.
24. (Amended) A method for detecting the gene rearrangement forming the SCCA2/SCCA1 fusion protein using a cDNA cloning and sequencing analysis of tumor DNA.

25. (Amended) A method for detecting the gene rearrangement forming the SCCA1/SCCA2 fusion protein using a Southern blot-technology applied on tumor DNA.
26. (Amended) A method for detecting the gene rearrangement forming the SCCA2/SCCA1 fusion protein using a Southern blot-technology applied on tumor DNA.
27. (Amended) A method for detecting the gene rearrangement forming the SCCA1/SCCA2 fusion protein using a PCR-analysis technology.
28. (Amended) A method for detecting the gene rearrangement forming the SCCA2/SCCA1 fusion protein using a PCR-analysis technology.
29. (Amended) A method for detecting the gene rearrangement forming the SCCA1/SCCA2 fusion protein using an amino acid sequencing technology.
30. (Amended) A method for detecting the gene rearrangement forming the SCCA2/SCCA1 fusion protein using an amino acid sequencing technology.
31. (Amended) A method for detection the SCCA1/A2 fusion protein using Western blotting.
32. (Amended) A method for detection the SCCA2/A1 fusion protein using Western blotting.
33. (Amended) A monoclonal antibody specific for SCCA1/SCCA2 fusion protein.
34. (Amended) A monoclonal antibody specific for SCCA2/SCCAZ fusion protein.
35. (Amended) A polyclonal antibody reactive with SCCA1/SCCA2 fusion protein.
36. (Amended) A monoclonal antibody specific for SCCA2/SCCA1 fusion protein.

37. (Amended) An immunoassay using a monoclonal antibody or polyclonal antibody specific for SCCA1/SCCA2 fusion protein for detecting the presence and concentration of SCCA1/SCCA2 fusion protein.

38. (Amended) An immunoassay using a monoclonal antibody or polyclonal antibody specific for SCCA2/SCCA1 fusion protein for detecting the presence and concentration of SCCA2/SCCA1 fusion protein.

39. (Amended) A method for diagnosing the presence or absence of a squamous cell carcinoma by detecting the SCCA1/SCCA2 fusion protein in a human sample.

40. (Amended) A method for diagnosing the presence or absence of a squamous cell carcinoma by detecting the SCCA2/SCCA1 fusion protein in a human sample.

41. (Amended) A method according to [claims 39-40] claim 39, wherein the fusion protein is used in a histochemical analysis.

42. (Amended) A kit comprising a SCCA1/SCCA2 fusion protein antibody to be used in the determination of the presence or absence of squamous cell carcinoma (SCC).

43. (Amended) A kit comprising a SCCA2/SCCA1 fusion protein antibody to be used in the determination of the presence or absence of squamous cell carcinoma (SCC).

44. (Amended) A kit according to [claim 42-43] claim 42, in that it further comprises antibodies related to SCCA1 and/or SCCA2.